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IEEE JNL IEEE Journal or Magazine  
IEE JNL IEE Journal or Magazine  
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Shung, C.B.; Jain, R.; Rimey, K.; Wang, E.; Srivastava, M.B.; Richards, B.C.; Lettang, E.; Khalid Azim, S.; Thon, L.; Hilfinger, P.N.; Rabaey, J.M.; Brodersen, R.W.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on  
Volume 10, Issue 4, April 1991 Page(s):447 - 463  
Digital Object Identifier 10.1109/43.75628  
[AbstractPlus](#) | Full Text: [PDF\(2116 KB\)](#) IEEE JNL
- ☐ **2. Mixing simulations and real subsystems for subsea robot development. Specification and development of the core simulation engine**  
Lane, D.M.; Falconer, G.J.; Randall, G.W.; Duffy, N.D.; Herd, J.T.; Chernet, P.; Hunter, J.; Colley, M.; Standeven, J.; Callaghan, V.; Smith, J.; Evans, J.; Woods, A.; Penrose, J.; Whittaker, G.A.; Smith, D.; Edwards, I.;  
OCEANS '98 Conference Proceedings  
Volume 3, 28 Sept.-1 Oct. 1998 Page(s):1382 - 1386 vol.3  
Digital Object Identifier 10.1109/OCEANS.1998.726295  
[AbstractPlus](#) | Full Text: [PDF\(656 KB\)](#) IEEE CNF
- ☐ **3. A technique for designing robotic control systems based on Petri nets**  
Caloini, A.; Magnani, G.; Pezze, M.;  
Control Systems Technology, IEEE Transactions on  
Volume 6, Issue 1, Jan. 1998 Page(s):72 - 87  
Digital Object Identifier 10.1109/87.654878  
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(440 KB\)](#) IEEE JNL
- ☐ **4. The ADAM design planning engine**  
Knapp, D.W.; Parker, A.C.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on  
Volume 10, Issue 7, July 1991 Page(s):829 - 846  
Digital Object Identifier 10.1109/43.87595  
[AbstractPlus](#) | Full Text: [PDF\(1712 KB\)](#) IEEE JNL
- ☐ **5. 1999 Index IEEE transactions on systems, man, and cybernetics Part A: systems and humans Vol. 29**  
Systems, Man and Cybernetics, Part A, IEEE Transactions on  
Volume 29, Issue 6, Nov. 1999 Page(s):1 - 11  
Digital Object Identifier 10.1109/TSMCA.1999.798811  
[AbstractPlus](#) | Full Text: [PDF\(248 KB\)](#) IEEE JNL
- ☐ **6. Composite objects: real-time programming with CORBA**  
Polze, A.; Sha, L.;  
Euromicro Conference, 1998. Proceedings. 24th  
Volume 2, 25-27 Aug. 1998 Page(s):997 - 1004 vol.2  
Digital Object Identifier 10.1109/EURMIC.1998.708133  
[AbstractPlus](#) | Full Text: [PDF\(732 KB\)](#) IEEE CNF

- ☐ **7. Real-time detection and tracking of a moving object using a complex programmable logic device**  
Benkhalil, A.K.; Sipson, S.S.; Booth, W.;  
Target Tracking and Data Fusion (Digest No. 1998/282), IEE Colloquium on  
9 June 1998 Page(s):10/1 - 10/7  
[AbstractPlus](#) | Full Text: [PDF\(436 KB\)](#) IEE CNF
  
- ☐ **8. The role of process abstraction in simulation**  
Fishwick, P.A.;  
Systems, Man and Cybernetics, IEEE Transactions on  
Volume 18, Issue 1, Jan.-Feb. 1988 Page(s):18 - 39  
Digital Object Identifier 10.1109/21.87052  
[AbstractPlus](#) | Full Text: [PDF\(2004 KB\)](#) IEEE JNL
  
- ☐ **9. 1995 Index IEEE Transactions on Software Engineering Vol. 21**  
Software Engineering, IEEE Transactions on  
Volume 21, Issue 12, Dec. 1995 Page(s):1  
Digital Object Identifier 10.1109/TSE.1995.489077  
[AbstractPlus](#) | Full Text: [PDF\(960 KB\)](#) IEEE JNL
  
- ☐ **10. A data flow architecture for parallel computation**  
Abellard, P.; Nolibe, G.; Razafindrakoto, N.;  
Databases, Parallel Architectures and Their Applications, PARBASE-90, International  
Conference on  
7-9 March 1990 Page(s):129 - 131  
Digital Object Identifier 10.1109/PARBSE.1990.77130  
[AbstractPlus](#) | Full Text: [PDF\(228 KB\)](#) IEEE CNF
  
- ☐ **11. Managing complexity of modeling industrial processes with P/T nets**  
Uthmann, C.V.; Becker, J.;  
Systems, Man, and Cybernetics, 1998. 1998 IEEE International Conference on  
Volume 1, 11-14 Oct 1998 Page(s):547 - 552 vol.1  
Digital Object Identifier 10.1109/ICSMC.1998.725469  
[AbstractPlus](#) | Full Text: [PDF\(608 KB\)](#) IEEE CNF
  
- ☐ **12. Real-time DKS on a single chip**  
Leung, S.; Shanblatt, M.;  
Robotics and Automation, IEEE Journal of [legacy, pre - 1988]  
Volume 3, Issue 4, Aug 1987 Page(s):281 - 290  
[AbstractPlus](#) | Full Text: [PDF\(1032 KB\)](#) IEEE JNL
  
- ☐ **13. An architecture for reflexive autonomous vehicle control**  
Payton, D.;  
Robotics and Automation. Proceedings. 1986 IEEE International Conference on  
Volume 3, Apr 1986 Page(s):1838 - 1845  
[AbstractPlus](#) | Full Text: [PDF\(1088 KB\)](#) IEEE CNF
  
- ☐ **14. Interoperability and synchronisation of distributed hardware-in-the-loop simulation for underwater robot development: issues and experiments**  
Lane, D.M.; Falconer, G.J.; Randall, G.; Edwards, I.;  
Robotics and Automation, 2001. Proceedings 2001 ICRA. IEEE International Conference on  
Volume 1, 2001 Page(s):909 - 914 vol.1  
Digital Object Identifier 10.1109/ROBOT.2001.932666  
[AbstractPlus](#) | Full Text: [PDF\(420 KB\)](#) IEEE CNF
  
- ☐ **15. Parallel implementation of Newton-Euler algorithm with one step ahead predictions**  
Yamakita, M.; Hoshino, Y.; Morimoto, K.; Furuta, K.;  
Control 1991. Control '91., International Conference on  
25-28 Mar 1991 Page(s):364 - 369 vol.1  
[AbstractPlus](#) | Full Text: [PDF\(320 KB\)](#) IEE CNF
  
- ☐ **16. Computers for symbolic processing**  
Wah, B.W.; Lowrie, M.B.; Li, G.-J.;

- ☐ **17. Back cover**  
Electron Devices, IEEE Transactions on  
Volume 32, Issue 12, Dec 1985 Page(s):c4 - c4  
Full Text: [PDF](#)(6424 KB) IEEE JNL
  
- ☐ **18. Back cover**  
Proceedings of the IEEE  
Volume 75, Issue 12, Dec. 1987 Page(s):c4 - c4  
Full Text: [PDF](#)(1994 KB) IEEE JNL
  
- ☐ **19. A real-time reflexive pilot for an autonomous land vehicle**  
Nitao, J.; Parodi, A.;  
Control Systems Magazine, IEEE  
Volume 6, Issue 1, Feb 1986 Page(s):14 - 23  
[AbstractPlus](#) | Full Text: [PDF](#)(1000 KB) IEEE JNL
  
- ☐ **20. Extending CAD tools and techniques**  
De Micheli, G.;  
Computer  
Volume 26, Issue 1, Jan. 1993 Page(s):85 - 87  
Digital Object Identifier 10.1109/2.179166  
[AbstractPlus](#) | Full Text: [PDF](#)(368 KB) IEEE JNL
  
- ☐ **21. Hardware-software co-design of embedded systems [and prolog]**  
Wolf, W.H.;  
Proceedings of the IEEE  
Volume 82, Issue 7, July 1994 Page(s):967 - 989  
Digital Object Identifier 10.1109/5.293155  
[AbstractPlus](#) | Full Text: [PDF](#)(2392 KB) IEEE JNL
  
- ☐ **22. System level hardware module generation**  
Srivastava, M.B.; Brodersen, R.W.;  
Very Large Scale Integration (VLSI) Systems, IEEE Transactions on  
Volume 3, Issue 1, March 1995 Page(s):20 - 35  
Digital Object Identifier 10.1109/92.365451  
[AbstractPlus](#) | Full Text: [PDF](#)(1732 KB) IEEE JNL
  
- ☐ **23. Design and control of a force-reflecting teleoperation system with magnetically levitated master and wrist**  
Salcudean, S.E.; Wong, N.M.; Hollis, R.L.;  
Robotics and Automation, IEEE Transactions on  
Volume 11, Issue 6, Dec. 1995 Page(s):844 - 858  
Digital Object Identifier 10.1109/70.478431  
[AbstractPlus](#) | Full Text: [PDF](#)(1940 KB) IEEE JNL
  
- ☐ **24. VLSI architectures for high-speed range estimation**  
Sastry, R.; Ranganathan, N.; Jain, R.C.;  
Pattern Analysis and Machine Intelligence, IEEE Transactions on  
Volume 17, Issue 9, Sept. 1995 Page(s):894 - 899  
Digital Object Identifier 10.1109/34.406655  
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(564 KB) IEEE JNL
  
- ☐ **25. SIERA: a unified framework for rapid-prototyping of system-level hardware and software**  
Srivastava, M.; Brodersen, R.W.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on  
Volume 14, Issue 6, June 1995 Page(s):676 - 693  
Digital Object Identifier 10.1109/43.387729  
[AbstractPlus](#) | Full Text: [PDF](#)(1876 KB) IEEE JNL

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- ☐ 1. **FLYSIG: dataflow oriented delay-insensitive processor for rapid prototyping of signal processing**  
Hardt, W.; Kleinjohann, B.;  
Rapid System Prototyping, 1998. Proceedings. 1998 Ninth International Workshop on 3-5 June 1998 Page(s):136 - 141  
Digital Object Identifier 10.1109/IWRSP.1998.676682  
[Abstract](#) | Full Text: [PDF\(52 KB\)](#) IEEE CNF
- ☐ 2. **SIERA: a unified framework for rapid-prototyping of system-level hardware and software**  
Srivastava, M.; Brodersen, R.W.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on Volume 14, Issue 6, June 1995 Page(s):676 - 693  
Digital Object Identifier 10.1109/43.387729  
[Abstract](#) | Full Text: [PDF\(1876 KB\)](#) IEEE JNL
- ☐ 3. **Advanced parallel processing with supercomputer architectures**  
Kai Hwang;  
Proceedings of the IEEE  
Volume 75, Issue 10, Oct. 1987 Page(s):1348 - 1379  
[Abstract](#) | Full Text: [PDF\(2813 KB\)](#) IEEE JNL
- ☐ 4. **Codesign of embedded systems: status and trends**  
Ernst, R.;  
Design & Test of Computers, IEEE  
Volume 15, Issue 2, April-June 1998 Page(s):45 - 54  
Digital Object Identifier 10.1109/54.679207  
[Abstract](#) | Full Text: [PDF\(108 KB\)](#) IEEE JNL
- ☐ 5. **Petri nets: Properties, analysis and applications**  
Murata, T.;  
Proceedings of the IEEE  
Volume 77, Issue 4, April 1989 Page(s):541 - 580  
Digital Object Identifier 10.1109/5.24143  
[Abstract](#) | Full Text: [PDF\(2988 KB\)](#) IEEE JNL
- ☐ 6. **Frameworks for developing intelligent systems: The ABE systems engineering environment**  
Hayes-Roth, F.; Davidson, J.E.; Erman, L.D.; Lark, J.S.;  
Expert, IEEE [see also IEEE Intelligent Systems and Their Applications]  
Volume 6, Issue 3, June 1991 Page(s):30 - 40  
Digital Object Identifier 10.1109/64.87682  
[Abstract](#) | Full Text: [PDF\(1332 KB\)](#) IEEE JNL
- ☐ 7. **1997 Index Proceedings Of The IEEE Vols. 83-85**

- ☐ **8. 1996 Index Proceedings of the IEEE Vol. 82-84**  
Proceedings of the IEEE  
Volume 84, Issue 12, Dec. 1996 Page(s):0\_5  
Digital Object Identifier 10.1109/JPROC.1996.546442  
[Abstract](#) | [Full Text: PDF\(5516 KB\)](#) IEEE JNL
  
- ☐ **9. The ADAM design planning engine**  
Knapp, D.W.; Parker, A.C.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on  
Volume 10, Issue 7, July 1991 Page(s):829 - 846  
Digital Object Identifier 10.1109/43.87595  
[Abstract](#) | [Full Text: PDF\(1712 KB\)](#) IEEE JNL
  
- ☐ **10. Using VHDL for high-level, mixed-mode system simulation**  
Srivastava, M.B.; Brodersen, R.W.;  
Design & Test of Computers, IEEE  
Volume 9, Issue 3, Sept. 1992 Page(s):31 - 40  
Digital Object Identifier 10.1109/54.156156  
[Abstract](#) | [Full Text: PDF\(960 KB\)](#) IEEE JNL
  
- ☐ **11. Modeling concurrent software**  
Sanden, B.;  
Software, IEEE  
Volume 14, Issue 5, Sept.-Oct. 1997 Page(s):93 - 100  
Digital Object Identifier 10.1109/52.605936  
[Abstract](#) | [Full Text: PDF\(568 KB\)](#) IEEE JNL
  
- ☐ **12. Using IDEF0 for dynamic process analysis**  
Peters, L.; Peters, J.;  
Robotics and Automation, 1997. Proceedings., 1997 IEEE International Conference on  
Volume 4, 20-25 April 1997 Page(s):3203 - 3208 vol.4  
Digital Object Identifier 10.1109/ROBOT.1997.606776  
[Abstract](#) | [Full Text: PDF\(684 KB\)](#) IEEE CNF
  
- ☐ **13. Implementation of very large dataflow graphs on a reconfigurable architecture for robotic application**  
Jean-Pierre, D.; Jean-Didier, L.; Tony, P.; Paul, F.;  
Parallel and Distributed Processing Symposium., Proceedings 15th International  
23-27 April 2001 Page(s):1450 - 1456  
[Abstract](#) | [Full Text: PDF\(384 KB\)](#) IEEE CNF
  
- ☐ **14. A Petri net based visual programming language**  
Usher, M.; Jackson, D.;  
Systems, Man, and Cybernetics, 1998. 1998 IEEE International Conference on  
Volume 1, 11-14 Oct 1998 Page(s):107 - 112 vol.1  
Digital Object Identifier 10.1109/ICSMC.1998.725393  
[Abstract](#) | [Full Text: PDF\(740 KB\)](#) IEEE CNF
  
- ☐ **15. CASDA: synthesized graphic design of real-time systems**  
Mendelbaum, H.G.; Finkelman, D.;  
Computer Graphics and Applications, IEEE  
Volume 9, Issue 1, Jan. 1989 Page(s):40 - 46  
Digital Object Identifier 10.1109/38.20332  
[Abstract](#) | [Full Text: PDF\(488 KB\)](#) IEEE JNL
  
- ☐ **16. A hardware-software codesign methodology for DSP applications**  
Kalavade, A.; Lee, E.A.;  
Design & Test of Computers, IEEE  
Volume 10, Issue 3, Sept. 1993 Page(s):16 - 28  
Digital Object Identifier 10.1109/54.232469

- ☐ **17. Virtual instrumentation and virtual environments**  
Spoelder, H.J.W.;  
Instrumentation & Measurement Magazine, IEEE  
Volume 2, Issue 3, Sep 1999 Page(s):14 - 19  
Digital Object Identifier 10.1109/5289.783107  
[Abstract](#) | Full Text: [PDF\(472 KB\)](#) IEEE JNL
  
- ☐ **18. Author Index**  
Supercomputing, 1995. Proceedings of the IEEE/ACM SC95 Conference  
1995 Page(s):ii - ii  
[Abstract](#) | Full Text: [PDF\(120 KB\)](#) IEEE CNF
  
- ☐ **19. Computers for symbolic processing**  
Wah, B.W.; Lowrie, M.B.; Li, G.-J.;  
Proceedings of the IEEE  
Volume 77, Issue 4, April 1989 Page(s):509 - 540  
Digital Object Identifier 10.1109/5.24142  
[Abstract](#) | Full Text: [PDF\(3060 KB\)](#) IEEE JNL
  
- ☐ **20. System level hardware module generation**  
Srivastava, M.B.; Brodersen, R.W.;  
Very Large Scale Integration (VLSI) Systems, IEEE Transactions on  
Volume 3, Issue 1, March 1995 Page(s):20 - 35  
Digital Object Identifier 10.1109/92.365451  
[Abstract](#) | Full Text: [PDF\(1732 KB\)](#) IEEE JNL
  
- ☐ **21. Design space exploration techniques for the codesign of embedded data processing systems**  
Deegener, M.; Huss, S.A.;  
Computers and Digital Techniques, IEE Proceedings-  
Volume 145, Issue 3, May 1998 Page(s):161 - 170  
[Abstract](#) | Full Text: [PDF\(1592 KB\)](#) IEE JNL
  
- ☐ **22. Hardware of structured brain computer**  
Ae, T.; Sakai, K.; Araki, H.; Honda, N.;  
Knowledge-Based Intelligent Electronic Systems, 1998. Proceedings KES '98. 1998 Second International Conference on  
Volume 3, 21-23 April 1998 Page(s):533 - 540 vol.3  
Digital Object Identifier 10.1109/KES.1998.726019  
[Abstract](#) | Full Text: [PDF\(464 KB\)](#) IEEE CNF
  
- ☐ **23. An integrated CAD system for algorithm-specific IC design**  
Shung, C.B.; Jain, R.; Rimey, K.; Wang, E.; Srivastava, M.B.; Richards, B.C.; Lettang, E.; Khalid Azim, S.; Thon, L.; Hilfinger, P.N.; Rabaey, J.M.; Brodersen, R.W.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on  
Volume 10, Issue 4, April 1991 Page(s):447 - 463  
Digital Object Identifier 10.1109/43.75628  
[Abstract](#) | Full Text: [PDF\(2116 KB\)](#) IEEE JNL
  
- ☐ **24. Interactive visualization of Earth and space science computations**  
Hibbard, W.L.; Paul, B.E.; Santek, D.A.; Dyer, C.R.; Battaiola, A.L.; Voidrot-Martinez, M.-F.;  
Computer  
Volume 27, Issue 7, July 1994 Page(s):65 - 72  
Digital Object Identifier 10.1109/2.299413  
[Abstract](#) | Full Text: [PDF\(728 KB\)](#) IEEE JNL
  
- ☐ **25. Computer-aided hardware-software codesign**  
De Micheli, G.;  
Micro, IEEE  
Volume 14, Issue 4, Aug. 1994 Page(s):10 - 16  
Digital Object Identifier 10.1109/40.296153  
[Abstract](#) | Full Text: [PDF\(680 KB\)](#) IEEE JNL

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## 1 [An environment for operational software engineering in Ada](#)



M. Baldassari, G. Bruno

January 1989 **Proceedings of the conference on Tri-Ada '89: Ada technology in context: application, development, and deployment**

Publisher: ACM Press

Full text available:  pdf(1.95 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper presents PROTOB, an object-oriented methodology and CASE system based on an extended dataflow model defined using PROT nets. It consists of several tools supporting specification, modelling and prototyping activities within the framework of the operational software life cycle paradigm. As its major application area it addresses distributed systems, such as real-time embedded systems, communication protocols and manufacturing control systems. The system automatically generates the ...

## 2 [Drawings on napkins, video-game animation, and other ways to program computers](#)



Ken Kahn

August 1996 **Communications of the ACM**, Volume 39 Issue 8

Publisher: ACM Press

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## 3 [Computer assisted application definition](#)



Martin Mikelsons

January 1975 **Proceedings of the 2nd ACM SIGACT-SIGPLAN symposium on Principles of programming languages**

Publisher: ACM Press

Full text available:  pdf(875.01 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

This paper describes a system being developed to bridge the gap between an application program and a user inexperienced in the ways of computers. The user explores the characteristics of the available programs by a natural language dialogue with the system. The dialogue is supported by a knowledge base covering both the program semantics and the application domain. This paper addresses the problems of representation and inference involved in this approach and describes our solution for them.

## 4 [A multimodel methodology for qualitative model engineering](#)



Paul A. Fishwick, Bernard P. Zeigler

January 1992 **ACM Transactions on Modeling and Computer Simulation (TOMACS)**, Volume 2 Issue 1

Publisher: ACM Press

Full text available:  pdf(1.93 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Qualitative models arising in artificial intelligence domain often concern real systems that



are difficult to represent with traditional means. However, some promise for dealing with such systems is offered by research in simulation methodology. Such research produces models that combine both continuous and discrete-event formalisms. Nevertheless, the aims and approaches of the AI and the simulation communities remain rather mutually ill understood. Consequently, there is a need to bridge t ...

**Keywords:** abstraction levels, combined simulation, homomorphism, multimodeling, qualitative simulation, systems theory

## 5 Loading databases using dataflow parallelism



Tom Barclay, Robert Barnes, Jim Gray, Prakash Sundaresan  
December 1994 **ACM SIGMOD Record**, Volume 23 Issue 4

**Publisher:** ACM Press

Full text available: pdf(1.49 MB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

This paper describes a parallel database load prototype for Digital's Rdb database product. The prototype takes a dataflow approach to database parallelism. It includes an *explorer* that discovers and records the cluster configuration in a database, a *client* CUI interface that gathers the load job description from the user and from the Rdb catalogs, and an *optimizer* that picks the best parallel execution plan and records it in a *web* data structure. The web describes th ...

## 6 What have we learnt from using real parallel machines to solve real problems?



G. C. Fox  
January 1989 **Proceedings of the third conference on Hypercube concurrent computers and applications - Volume 2**

**Publisher:** ACM Press

Full text available: pdf(4.08 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We briefly review some key scientific and parallel processing issues in a selection of some 84 existing applications of parallel machines. We include the MIMD hypercube transputer array, BBN Butterfly, and the SIMD ICL DAP, Goodyear MPP and Connection Machine from Thinking Machines. We use a space-time analogy to classify problems and show how a division into synchronous, loosely synchronous and asynchronous problems is helpful. This classifies problems into those suitable for SIMD or MIMD ...

## 7 A hybrid numeric/symbolic program for checking functional and timing compatibility of synthesized designs

Chih Tung Chen, Alice C. Parker

May 1994 **Proceedings of the 7th international symposium on High-level synthesis**

**Publisher:** IEEE Computer Society Press

Full text available: pdf(588.17 KB) Additional Information: [full citation](#), [references](#)

## 8 Evolving virtual creatures



Karl Sims  
July 1994 **Proceedings of the 21st annual conference on Computer graphics and interactive techniques**

**Publisher:** ACM Press

Full text available: pdf(84.65 KB) ps(219.40 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper describes a novel system for creating virtual creatures that move and behave in simulated three-dimensional physical worlds. The morphologies of creatures and the neural systems for controlling their muscle forces are both generated automatically using genetic algorithms. Different fitness evaluation functions are used to direct simulated evolutions towards specific behaviors such as swimming, walking, jumping, and following. A genetic language is presented that uses no ...

## 9

## Java as a specification language for hardware-software systems



The specification language is a critical component of the hardware-software co-design process since it is used for functional validation and as a starting point for hardware-software partitioning and co-synthesis. This paper proposes the Java programming language as a specification language for hardware-software systems. Java has several characteristics that make it suitable for system specification. However, static control and dataflow analysis of Java programs is problematic because Java cla ...

**Keywords:** java, specification languages, hardware-software co-design

## 10 HPTS: a behaviour modelling language for autonomous agents



Stéphane Donikian

May 2001 **Proceedings of the fifth international conference on Autonomous agents**

**Publisher:** ACM Press

Full text available:  [pdf\(920.14 KB\)](#)

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Behavioural models offer the ability to simulate autonomous agents like organisms and living beings. Psychological studies have shown that human behaviour can be described by a perception-decision-action loop, in which the decisional process should integrate several programming paradigms such as real-time, concurrency, and hierarchy. Building such systems for interactive simulation requires the design of a reactive system treating flows of data to and from the environment, and involving ...

**Keywords:** agent architectures, behaviour modelling language, believability, synthetic agents


## 11 Distributed artificial intelligence: an annotated bibliography



V. Jagannathan, Rajendra Dodhiawala

January 1986 **ACM SIGART Bulletin**, Issue 95

**Publisher:** ACM Press

Full text available:  [pdf\(1.51 MB\)](#)

Additional Information: [full citation](#)

## 12 Computing as a discipline



D. E. Comer, David Gries, Michael C. Mulder, Allen Tucker, A. Joe Turner, Paul R. Young

February 1989 **Communications of the ACM**, Volume 32 Issue 1

**Publisher:** ACM Press

Full text available:  [pdf\(1.68 MB\)](#)

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The final report of the Task Force on the Core of Computer Science presents a new intellectual framework for the discipline of computing and a new basis for computing curricula. This report has been endorsed and approved for release by the ACM Education Board.

## 13 COAST: the controller's assistant



William H. Duquette

December 1993 **Proceedings of the 25th conference on Winter simulation**

**Publisher:** ACM Press

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## "Topologies"—distributed objects on multicomputers

Karsten Schwan, Win Bo

May 1990 **ACM Transactions on Computer Systems (TOCS)**, Volume 8 Issue 2

**Publisher:** ACM Press

Full text available: pdf(3.83 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Application programs written for large-scale multicomputers with interconnection structures known to the programmer (e.g., hypercubes or meshes) use complex communication structures for connecting the applications' parallel tasks. Such structures implement a wide variety of functions, including the exchange of data or control information relevant to the task computations and/or the communications required for task synchronization, message forwarding/filtering under program control, and so on ...



## 15 The future of high performance computers in science and engineering



C. Gordon Bell

September 1989 **Communications of the ACM**, Volume 32 Issue 9

**Publisher:** ACM Press

Full text available: pdf(1.27 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

A vast array of new, highly parallel machines are opening up new opportunities for new applications and new ways of computing.

## 16 Design methodology for PicoRadio networks



J. da Silva, J. Shamberger, M. Ammer, C. Guo, S. Li, R. Shah, T. Tuan, M. Sheets, J. Rabaey, B. Nikolic, A. Sangiovanni-Vincentelli, P. Wright

March 2001 **Proceedings of the conference on Design, automation and test in Europe**

**Publisher:** IEEE Press

Full text available: pdf(328.60 KB)

Additional Information: [full citation](#), [references](#), [index terms](#)

## 17 Programming languages for distributed computing systems



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September 1989 **ACM Computing Surveys (CSUR)**, Volume 21 Issue 3

**Publisher:** ACM Press

Full text available: pdf(6.50 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

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## 18 Strategic directions in constraint programming



Pascal Van Hentenryck, Vijay Saraswat

December 1996 **ACM Computing Surveys (CSUR)**, Volume 28 Issue 4

**Publisher:** ACM Press

Full text available: pdf(402.08 KB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

## 19 The Apiary network architecture for knowledgeable systems



Carl Hewitt

August 1980 **Proceedings of the 1980 ACM conference on LISP and functional programming**

**Publisher:** ACM Press

Full text available: pdf(884.30 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

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20 Stochastic processes as concurrent constraint programs



Vineet Gupta, Radha Jagadeesan, Prakash Panangaden

January 1999 **Proceedings of the 26th ACM SIGPLAN-SIGACT symposium on Principles of programming languages**

**Publisher:** ACM Press

Full text available:  [pdf\(2.12 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

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## 1 [An environment for operational software engineering in Ada](#)



M. Baldassari, G. Bruno

January 1989 **Proceedings of the conference on Tri-Ada '89: Ada technology in context: application, development, and deployment**

Publisher: ACM Press

Full text available:  [pdf\(1.95 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper presents PROTOB, an object-oriented methodology and CASE system based on an extended dataflow model defined using PROT nets. It consists of several tools supporting specification, modelling and prototyping activities within the framework of the operational software life cycle paradigm. As its major application area it addresses distributed systems, such as real-time embedded systems, communication protocols and manufacturing control systems. The system automatically generates the ...

## 2 [Drawings on napkins, video-game animation, and other ways to program computers](#)



Ken Kahn

August 1996 **Communications of the ACM**, Volume 39 Issue 8

Publisher: ACM Press

Full text available:  [pdf\(1.64 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

## 3 [Computer assisted application definition](#)



Martin Mikelsons

January 1975 **Proceedings of the 2nd ACM SIGACT-SIGPLAN symposium on Principles of programming languages**

Publisher: ACM Press

Full text available:  [pdf\(875.01 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

This paper describes a system being developed to bridge the gap between an application program and a user inexperienced in the ways of computers. The user explores the characteristics of the available programs by a natural language dialogue with the system. The dialogue is supported by a knowledge base covering both the program semantics and the application domain. This paper addresses the problems of representation and inference involved in this approach and describes our solution for them.


## 4 [A multimodel methodology for qualitative model engineering](#)



Paul A. Fishwick, Bernard P. Zeigler

January 1992 **ACM Transactions on Modeling and Computer Simulation (TOMACS)**, Volume 2 Issue 1

Publisher: ACM Press

Full text available:  [pdf\(1.93 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Qualitative models arising in artificial intelligence domain often concern real systems that

are difficult to represent with traditional means. However, some promise for dealing with such systems is offered by research in simulation methodology. Such research produces models that combine both continuous and discrete-event formalisms. Nevertheless, the aims and approaches of the AI and the simulation communities remain rather mutually ill understood. Consequently, there is a need to bridge t ...

**Keywords:** abstraction levels, combined simulation, homomorphism, multimodeling, qualitative simulation, systems theory

## 5 Loading databases using dataflow parallelism



Tom Barclay, Robert Barnes, Jim Gray, Prakash Sundaresan  
December 1994 **ACM SIGMOD Record**, Volume 23 Issue 4

**Publisher:** ACM Press

Full text available: pdf(1.49 MB) Additional Information: [full citation](#), [abstract](#), [citings](#), [index terms](#)

This paper describes a parallel database load prototype for Digital's Rdb database product. The prototype takes a dataflow approach to database parallelism. It includes an *explorer* that discovers and records the cluster configuration in a database, a *client* CUI interface that gathers the load job description from the user and from the Rdb catalogs, and an *optimizer* that picks the best parallel execution plan and records it in a *web* data structure. The web describes th ...

## 6 What have we learnt from using real parallel machines to solve real problems?



G. C. Fox  
January 1989 **Proceedings of the third conference on Hypercube concurrent computers and applications - Volume 2**

**Publisher:** ACM Press

Full text available: pdf(4.08 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

We briefly review some key scientific and parallel processing issues in a selection of some 84 existing applications of parallel machines. We include the MIMD hypercube transputer array, BBN Butterfly, and the SIMD ICL DAP, Goodyear MPP and Connection Machine from Thinking Machines. We use a space-time analogy to classify problems and show how a division into synchronous, loosely synchronous and asynchronous problems is helpful. This classifies problems into those suitable for SIMD or MIMD ...

## 7 A hybrid numeric/symbolic program for checking functional and timing compatibility of synthesized designs

Chih Tung Chen, Alice C. Parker

May 1994 **Proceedings of the 7th international symposium on High-level synthesis**

**Publisher:** IEEE Computer Society Press

Full text available: pdf(588.17 KB) Additional Information: [full citation](#), [references](#)

## 8 Evolving virtual creatures



Karl Sims  
July 1994 **Proceedings of the 21st annual conference on Computer graphics and interactive techniques**

**Publisher:** ACM Press

Full text available: pdf(84.65 KB) ps(219.40 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

This paper describes a novel system for creating virtual creatures that move and behave in simulated three-dimensional physical worlds. The morphologies of creatures and the neural systems for controlling their muscle forces are both generated automatically using genetic algorithms. Different fitness evaluation functions are used to direct simulated evolutions towards specific behaviors such as swimming, walking, jumping, and following. A genetic language is presented that uses no ...

## 9

## Java as a specification language for hardware-software systems



The specification language is a critical component of the hardware-software co-design process since it is used for functional validation and as a starting point for hardware-software partitioning and co-synthesis. This paper proposes the Java programming language as a specification language for hardware-software systems. Java has several characteristics that make it suitable for system specification. However, static control and dataflow analysis of Java programs is problematic because Java cla ...

**Keywords:** java, specification languages, hardware-software co-design

## 10 HPTS: a behaviour modelling language for autonomous agents



Stéphane Donikian

May 2001 **Proceedings of the fifth international conference on Autonomous agents**

**Publisher:** ACM Press

Full text available:  [pdf\(920.14 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Behavioural models offer the ability to simulate autonomous agents like organisms and living beings. Psychological studies have shown that human behaviour can be described by a perception-decision-action loop, in which the decisional process should integrate several programming paradigms such as real-time, concurrency, and hierarchy. Building such systems for interactive simulation requires the design of a reactive system treating flows of data to and from the environment, and involving ...

**Keywords:** agent architectures, behaviour modelling language, believability, synthetic agents

## 11 Distributed artificial intelligence: an annotated bibliography



V. Jagannathan, Rajendra Dodhiawala

January 1986 **ACM SIGART Bulletin**, Issue 95

**Publisher:** ACM Press

Full text available:  [pdf\(1.51 MB\)](#)

Additional Information: [full citation](#)


## 12 Computing as a discipline



D. E. Comer, David Gries, Michael C. Mulder, Allen Tucker, A. Joe Turner, Paul R. Young

February 1989 **Communications of the ACM**, Volume 32 Issue 1

**Publisher:** ACM Press

Full text available:  [pdf\(1.68 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The final report of the Task Force on the Core of Computer Science presents a new intellectual framework for the discipline of computing and a new basis for computing curricula. This report has been endorsed and approved for release by the ACM Education Board.

## 13 COAST: the controller's assistant



William H. Duquette

December 1993 **Proceedings of the 25th conference on Winter simulation**

**Publisher:** ACM Press

Full text available:  [pdf\(427.55 KB\)](#)

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## "Topologies"—distributed objects on multicomputers

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Pascal Van Hentenryck, Vijay Saraswat

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**Publisher:** ACM Press

Full text available: [pdf\(402.08 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



## 19 The Apiary network architecture for knowledgeable systems



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August 1980 **Proceedings of the 1980 ACM conference on LISP and functional programming**

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Publisher: ACM Press

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## 1 [Research directions in virtual environments: report of an NSF Invitational Workshop,](#)


[March 23-24, 1992, University of North Carolina at Chapel Hill](#)

Gary Bishop, Henry Fuchs

August 1992 **ACM SIGGRAPH Computer Graphics**, Volume 26 Issue 3

Publisher: ACM Press

Full text available: [pdf\(2.33 MB\)](#) Additional Information: [full citation](#), [citations](#), [index terms](#)

## 2 [A hybrid numeric/symbolic program for checking functional and timing compatibility of synthesized designs](#)

Chih Tung Chen, Alice C. Parker

May 1994 **Proceedings of the 7th international symposium on High-level synthesis**

Publisher: IEEE Computer Society Press

Full text available: [pdf\(588.17 KB\)](#) Additional Information: [full citation](#), [references](#)

## 3 [The ControlShell component-based real-time programming system, and its application to the Marsokhod Martian Rover](#)



Stan Schneider, Vincent Chen, Jay Steele, Gerardo Pardo-Castellote

November 1995 **ACM SIGPLAN Notices , Proceedings of the ACM SIGPLAN 1995 workshop on Languages, compilers, & tools for real-time systems LCTES '95**, Volume 30 Issue 11

Publisher: ACM Press

Full text available: [pdf\(1.39 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Real-time system software is notoriously hard to share and reuse. This paper walks through the methodology and application of ControlShell, a component-based programming system for real-time system software development. ControlShell combines graphical system-building tools, an execution-time configuration manager, a real-time matrix package, and an object name service into an integrated development environment. It targets complex systems that require on-line reconfiguration and strategic control ...

## 4 [A real world object modeling method for creating simulation environment of real-time systems](#)



Ji Y. Lee, Hye J. Kim, Kyo C. Kang

October 2000 **ACM SIGPLAN Notices , Proceedings of the 15th ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications OOPSLA '00**, Volume 35 Issue 10

Publisher: ACM Press

Full text available: [pdf\(405.18 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Most real-time embedded control software feature complex interactions with asynchronous inputs and environment objects, and a meaningful simulation of a real-time control software specification requires realistic simulation of its environment. Two problems that need to be addressed in the simulation of a target software system and its environment: First, integration and simulation of the specifications of a target software system and its artificial environment are often performed too late in the ...

**Keywords:** real-time control software, requirement specification, simulation, validation, verification

5 Future of simulation: Interactive simulation using virtual systems: web based robot simulation using VRML

Martin Rohrmeier

December 2000 **Proceedings of the 32nd conference on Winter simulation**

**Publisher:** Society for Computer Simulation International

Full text available:  pdf(320.46 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

The Virtual Reality Modeling Language (VRML) enables the integration of interactive 3D graphics into the web. At the German Aerospace Center we have been using the new language in robotic applications from its beginning on. The shown project is an example of the possibilities of using it in web-based simulations. Specialized and expensive hardor software is not needed, any web browser with a vrml viewer is able to run the program which makes the application independent from any underlying hardwa ...

6 Object oriented simulation with SMALLTALK-80: a case study

Jocelyn R. Drolet, Colin L. Moodie, Benoit Montreuil

December 1991 **Proceedings of the 23rd conference on Winter simulation**

**Publisher:** IEEE Computer Society

Full text available:  pdf(917.90 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

**Keywords:** SmallTalk, cell, modeling, object, simulation, virtual

7 Implementation of the data-flow synchronous language SIGNAL

 Pascalin Amagbégnon, Loïc Besnard, Paul Le Guernic


June 1995 **ACM SIGPLAN Notices , Proceedings of the ACM SIGPLAN 1995 conference on Programming language design and implementation PLDI '95**, Volume 30 Issue 6

**Publisher:** ACM Press

Full text available:  pdf(1.03 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper presents the techniques used for the compilation of the data-flow, synchronous language SIGNAL. The key feature of the compiler is that it performs formal calculus on systems of boolean equations. The originality of the implementation of the compiler lies in the use of a tree structure to solve the equations.

8 Toward a real-time Ada design methodology

 Norman R. Howes

December 1990 **Proceedings of the conference on TRI-ADA '90**

**Publisher:** ACM Press

Full text available:  pdf(1.63 MB) Additional Information: [full citation](#), [references](#), [citations](#)

9 Real-time hierarchically distributed processing network interaction simulation

Wayne F. Zimmerman, Chung-I Wu

January 1988 **Proceedings of the 21st annual symposium on Simulation**

**Publisher:** IEEE Computer Society Press

Full text available:  pdf(1.26 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The Telerobot Testbed is a hierarchically distributed processing system which is linked together through a standard, commercial Ethernet. Standard Ethernet systems are primarily designed to manage non-real-time information transfer. Therefore, collisions on the net (i.e., two or more sources attempting to send data at the same time) are managed by randomly rescheduling one of the sources to retransmit at a later time interval. Although acceptable for transmitting noncritical data such as ma ...

10 Hierarchical decomposition and simulation of manufacturing cells

Charles J. Antonelli, Richard A. Volz, Trevor N. Mudge

January 1984 **Proceedings of the 16th conference on Winter simulation**

**Publisher:** IEEE Press

Full text available:  pdf(776.02 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A useful tool in the development of flexible automation is a system description language which can generate complete functional description of a manufacturing cell of arbitrary complexity. We propose a description system based on the concept of hierarchical decomposition utilizing the Ada1 programming language in conjunction with established diagrammatical decomposition methods. Simulation is often an indispensable tool in the development of manufacturing systems. We sh ...

**Keywords:** Functional description, Hierarchical decomposition, Manufacturing cell simulation, System description language

11 An environment for operational software engineering in Ada



M. Baldassari, G. Bruno

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12 An integrated approach to system modeling using a synthesis of artificial intelligence, software engineering and simulation methodologies



Paul A. Fishwick

October 1992 **ACM Transactions on Modeling and Computer Simulation (TOMACS)**, Volume 2 Issue 4

**Publisher:** ACM Press

Full text available:  pdf(1.58 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#), [review](#)

13 Software engineering of virtual worlds



G. Jounghyun Kim, Kyo Chul Kang, Hyejung Kim, Jiyoung Lee

November 1998 **Proceedings of the ACM symposium on Virtual reality software and technology**

**Publisher:** ACM Press

Full text available:  pdf(1.12 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

14 An architectural design for digital objects

Paul A. Fishwick

December 1998 **Proceedings of the 30th conference on Winter simulation**

**Publisher:** IEEE Computer Society Press

Full text available:  pdf(118.60 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

15 Software development of real-time systems



Hassan Gomaa

July 1986 **Communications of the ACM**, Volume 29 Issue 7

**Publisher:** ACM Press

Full text available: pdf(1.19 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Concentrating on those aspects of software development peculiar to real-time systems, this collection of development methods and tools emphasizes incremental development; the testing of task interfaces during integration testing, as well as unit and partial integration testing on the development system; and the development of automated tools to assist in the testing process.

16 Applying knowledge-based system design and simulation in information system requirements determination



Kung-Chao Liu, Jerzy W. Rozenblit

December 1990 **Proceedings of the 22nd conference on Winter simulation**

**Publisher:** IEEE Press

Full text available: pdf(496.88 KB)

Additional Information: [full citation](#), [references](#), [index terms](#)

17 Graphic modeling using heterogeneous hierarchical models



Victor T. Miller, Paul A. Fishwick

December 1993 **Proceedings of the 25th conference on Winter simulation**

**Publisher:** ACM Press

Full text available: pdf(620.20 KB)

Additional Information: [full citation](#), [references](#), [citations](#)

18 Special issue: AI in engineering



D. Sriram, R. Joobhani

April 1985 **ACM SIGART Bulletin**, Issue 92

**Publisher:** ACM Press

Full text available: pdf(8.79 MB)

Additional Information: [full citation](#), [abstract](#)

The papers in this special issue were compiled from responses to the announcement in the July 1984 issue of the SIGART newsletter and notices posted over the ARPAnet. The interest being shown in this area is reflected in the sixty papers received from over six countries. About half the papers were received over the computer network.

19 The new design: the changing role of industrial engineers in the design process through the use of simulation



Deidra L. Donald, Nick Andreou, Jeffrey Abell, Robert J. Schreiber

December 1999 **Proceedings of the 31st conference on Winter simulation: Simulation--a bridge to the future - Volume 1**

**Publisher:** ACM Press

Full text available: pdf(62.21 KB)

Additional Information: [full citation](#), [citations](#), [index terms](#)

20 Computer simulation of communications on the space station data management system



J. R. Agre, J. A. Clarke, M. W. Atkinson, I. H. Shahnawaz

December 1987 **Proceedings of the 19th conference on Winter simulation**

**Publisher:** ACM Press

Full text available: pdf(1.32 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A discrete event simulation model for performance evaluation of various alternatives in the design of the communication system on the Data Management System (DMS) of the space station has been developed. DMS.SIM, the SIMSCRIPT-based model of DMS

consists of two components: (I) The communication architecture model of multiple, interconnected, fiber-optic, local area networks (LANs) where the LAN access protocol is either token-bus or a version of CSMA/CD with deterministic collision ...

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### Dataflow Partitioning and Scheduling Algorithms for WASMII, a Virtual Hardware

A Takayama, Y Shibata, K Iwai, H Amano - FPL, 2000 - springerlink.com

... Results of the HDL **simulation** are shown in Fig. ... serial token transfer at '**robot**', '**fpppp**' and ... **Dataflow** Partitioning and Scheduling Algorithms for WASMII ...

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### A programmer's assistant for a special-purpose **dataflow** language (MS Thesis)

AJ BLACK - 1985 - csa.com

... for a special-purpose **dataflow** language was designed and implemented. The motivation for the effort was the need to construct a **robot simulation** facility which ...

[Web Search](#)

### Programmer's apprentice for a special-purpose robotics **dataflow** language.

AJ BLACK, GB LAMONT, SK ROGERS - INTELLIGENT ROBOTS AND COMPUTER VISION., 1985,, 1985 - csa.com

Programmer's apprentice for a special-purpose robotics **dataflow** language. ... Assistant (GDA) designed to help researchers construct **robot simulation** models on a ...

[Web Search](#) - [csa.com](#)

### A task-level **robot** programming language and its reactive execution

E Coste-Maniere, B Espiau, E Rutten - Proceedings of the 1992 IEEE International Conference on ..., 1992 - ieeexplore.ieee.org

... elements are actions in a general way, of which the **robot**-tasks presented here ... assistance in telerobotic [14], in which it was applied to **simulation**, based on ...

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### Visual Programming for **Robot** Control

PT Cox, TJ Smedley - VL, 1998 - doi.ieeecomputersociety.org

... don't care" representation, used when we define rules for **robot** behaviour, constructed ... of sensor definitions and local operations is a logic/**dataflow** hybrid ...

Cited by 6 - [Web Search](#) - [doi.ieeeecs.org](#) - [torch.cs.dal.ca](#) - [portal.acm.org](#) - [all 9 versions »](#)

### Specification and execution of multiagent missions

DC MacKenzie, JM Cameron, RC Arkin - 1995 - doi.ieeeecs.org

... either drive the targeted vehicles or a suitable **simulation**. ... Each individual **robot** is controlled by a single ... CNL is a hybrid **dataflow** language[12] using large ...

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### Signal GT : implementing task preemption and time intervals in the synchronous **dataflow** language ...

E Rutten, F Martinez - Proc. of the 7 th Euromicro Workshop on Real Time Systems, ..., 1995 - doi.ieeecomputersociety.org

... level framework, and the tools of the SIGNAL environment for optimization, **simulation** or proof ... Eg for a **robot**, transitions can be made from a wall-following ...

Cited by 17 - [Web Search](#) - [doi.ieeeecs.org](#) - [ieeexplore.ieee.org](#) - [ieeexplore.ieee.org](#)

### Integrating Planning and Reacting in a Heterogeneous Asynchronous Architecture for Controlling Real- ...

E Gat - PROC TENTH NATL CONF ARTIF INTELL AAAI 92., AAAI, MENLO PARK ..., 1992 - flownet.com

... ALFA provides both **dataflow** and state-machine computational models ... operates in real time, and includes an accurate kinematic **simulation** of the **robot**, as well ...

Cited by 206 - [View as HTML](#) - [Web Search](#) - [flownet.com](#) - [cs.biu.ac.il](#) - [csa.com](#)

### A Research Program for Autonomous Agent Behavior Specification and Analysis

TC Henderson, P Dalton, J Zachary - Proceeding of the IEEE International Symposium on ..., 1991 - ieeexplore.ieee.org

... specify the system in S/R (a **dataflow** automaton language ... and this combined with acc to the **robot's** sensory ... it can be connected to either the **simulation** or to ...

Cited by 2 - [Web Search](#)

### ... Computer Vision Algorithms in Hardware: An FPGA/VHDL-Based Vision System for a Mobile **Robot**

RAC Bianchi, AHR Costa - RoboCup, 2001 - [springerlink.com](http://springerlink.com)

... than hardware ap- proaches and hinder **robot** miniaturization. ... a simplified thresholding device using the **dataflow** method ... were tested using the **simulation** tool of ...

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